

FELISTROPHORUS, A NEW GENUS OF MITES ON CATS IN  
PUERTO RICO (ACARINA: LISTROPHORIDAE)

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ABSTRACT—A new genus, *Felistrophorus*, is described for *Lynxacarus radovskyi* Tenorio. This mite, previously reported only from the Hawaiian Islands, is common on domestic cats (*Felis catus*) in Puerto Rico.

The cat fur mite recently described by Tenorio (1974) is here reported from Puerto Rico by a curious custom that all the Hawaiian species of Listrophoridae eventually get reported from Puerto Rico (Tamsitt and Fox, 1970). And it is interesting that I found the species common on cats in Puerto Rico at about the same time that it was found in Hawaii, October, 1972. It is for future research to show how widely the cat fur mite ranges and how it affects our beloved pets.

*Felistrophorus* Fox, NEW GENUS

Fig. 1-3

In both sexes prescapular and postscapular plates well developed but not completely separated from each other, joined at the midline by a sclerotized bridge. Postscapular plate with many tubercles arranged in transverse rows and posteriorly with a large pore. Tibiae I and II each with a long seta arising from a dorsal curved process. Male with lateral opisthosomal plates; Legs III and IV only slightly wider than Legs I and II; penis large, rod-like, anteriorly with a sclerite in the form of an inverted "U"; opisthosoma bilobed posteriorly, the lobes well defined. Female without opisthosomal plates; venter with a prominent sclerotized arch between Legs II and III.

Type-species: *Lynxacarus radovskyi* Tenorio.

DISCUSSION

The peculiar bridge joining the prescapular and postscapular plates (Fig. 1-3) distinguishes *Felistrophorus* from *Lynxacarus*, and so do other features. In *L. morlani* Radford, the type-species of *Lynxacarus*, the prescapular and postscapular plates are completely separated according to illustrations in Dubinina (1971) and Fain and Hyland (1974). The male of *L. morlani* lacks lateral opisthosomal plates, has greatly expanded posterior legs, and its penial sclerite is in the form of an inverted "Y"; but the male of *Felistrophorus radovskyi* has lateral opisthosomal plates, normal or slightly enlarged posterior legs, and its penial sclerite is in the form of an inverted "U".

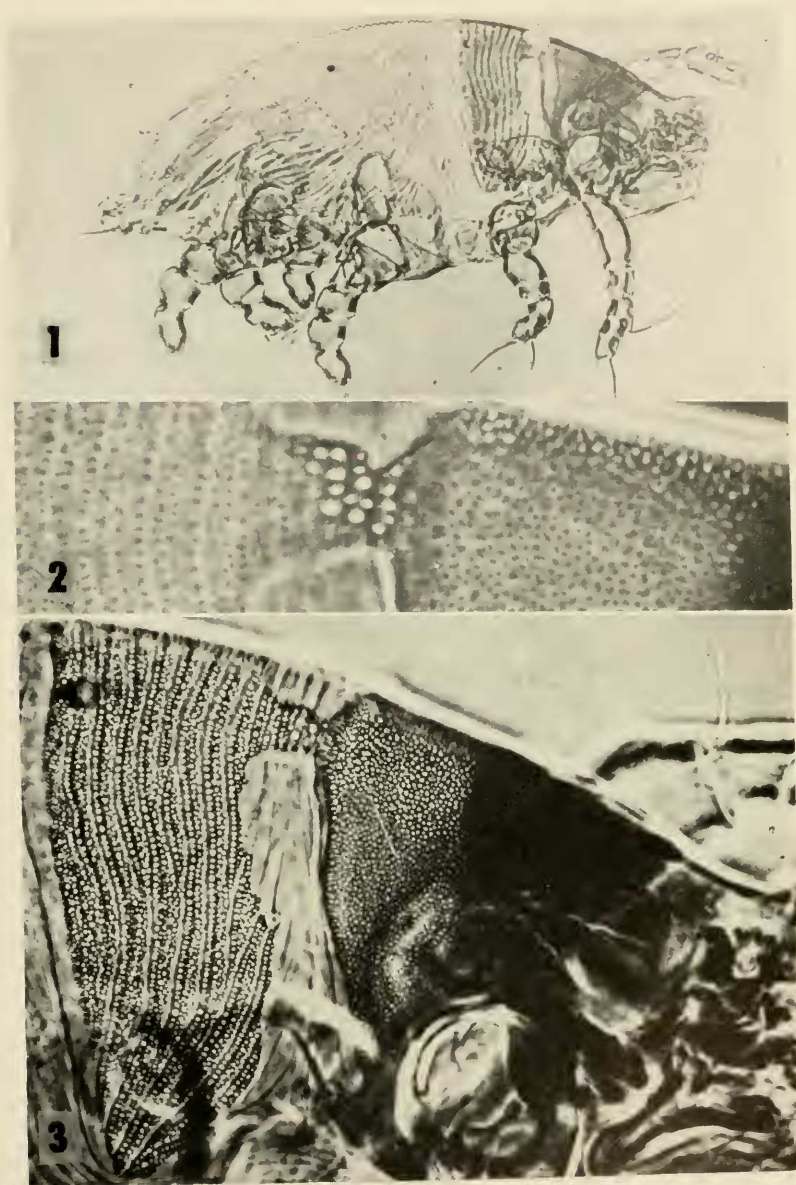


Fig. 1-3. *Felistrophorus radovskyi* (Tenorio) male. 1, dorso-lateral view. 2, detail of sclerotized bridge between pre- and post-scapular plates. 3, pre- and post-scapular plates.

Between October 2, 1972, and June 30, 1975, I examined thirty cats from northeastern Puerto Rico, and twenty-four of them were infested with *F. radovskyi*. Some records are: San Juan, Santurce, Ocean Park, on cat (Persian named "Shelly"), 2 October 1972, 1 ♀; 15 July 1973, 1 ♀, 1 ♂; 25 June 1975, 1 ♀, 1 ♂ (1975 material in the U.S. National Museum). Same locality, on cat (Persian named "Sheba"), 4 October 1972, 1 ♀, 1 ♂; 7 December 1973, 1 ♀; 29 October 1974, 1 ♂ (Figs. 1-3); 30 June 1975, 1 ♀, 1 ♂ (1975 material in the U.S. National Museum). Same locality, in house dust, 18 August 1975, 1 ♀, 1 ♂ (in the U.S. National Museum). On cats (American short hair) from: San Juan, Puerta de Tierra, School of Tropical Medicine Animal House, 27 December 1972, 1 ♀, 1 ♂; San Juan, Rio Piedras, Medical Sciences Campus, Tenth Floor, 6 July 1973, 1 ♀; 15 April 1974, 1 ♂. Toa Baja, 24 September 1973, 1 ♂. Guaynabo, 24 April 1973, nymph. Trujillo Alto, 23 April 1973, 1 ♂. Caguas, 14 November 1973, 1 ♀.

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#### REFERENCES

- Dubinina, H. V. 1971. Peculiarities of the development of morphological structure in genera of the subfamily Listrophorinae. Proc. 3rd Int. Congr. Acarology, Prague, pp. 397-401.
- Fain, A. and K. Hyland. 1974. The Listrophoroid mites in North America. II. The Family Listrophoridae. Bull. Inst. R. Sci. Nat. Belg. Biol. 50:1-69.
- Tamsitt, J. A. and I. Fox. 1970. Mites of the family Listrophoridae in Puerto Rico. Can. J. Zool. 48:398-399.
- Tenorio, J. M. 1974. A new species of *Lynxacarus* (Acarina: Astigmata: Listrophoridae) from *Felis catus* in the Hawaiian Islands. J. Med. Entomol. 11: 599-604.